U.S. DEPARTMENT OF ENERGY Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Friday Evening, September 12, 2008

Major Developments

Update: Oil & Gas Production Remains Suspended as Hurricane Ike Pummels Gulf of Mexico September 12

As of 5:00 PM EDT September 12, Hurricane Ike is moving through the Gulf of Mexico in a northwesterly direction towards the Texas Gulf Coast as a category two hurricane with maximum sustained winds of 105 mph, according to the National Oceanic and Atmospheric Administration (NOAA). NOAA expects the storm to strengthen to a category three hurricane before making landfall in Texas early on September 13. Offshore oil and gas operators in the Gulf of Mexico have evacuated platforms and rigs and have shut-in oil and natural gas production in preparation for Hurricane Ike; most of the preparations had been completed in advance of Hurricane Gustav. As of 12:30 PM EDT September 12, the U.S. Minerals Management Service (MMS) estimates that approximately 1.27 million b/d of oil and 7.0 MMcf/d of natural gas production is shut-in in the Gulf of Mexico, equivalent to about 97.5% of total oil and 94.4% of total natural gas production in the Gulf

http://www.noaawatch.gov/2008/ike.php

http://www.mms.gov/ooc/press/2008/press0912.htm

For more information, please view OE's most recent situation report:

http://www.oe.netl.doe.gov/named_event.aspx?ID=18

Thirteen Texas Gulf Coast Refineries Shut Down as Hurricane Ike Approaches

As of 10:00 AM EDT September 12, thirteen Texas refineries have shut down due to Hurricane Ike. These refineries located in Port Arthur, Houston/Texas City, and Corpus Christi regions have a total operable capacity of 3.6 million b/d. The following refineries have been shut:

- ExxonMobil's 567,000 b/d Baytown, TX Refinery
- BP's 467,720 Texas City, TX Refinery
- ExxonMobil's 348,500 b/d Beaumont, TX Refinery
- Deer Park's 329,800 b/d Deer Park, TX Refinery
- Valero's 289,000 b/d Port Arthur, TX Refinery
- Flint Hills Resources's 288,126 b/d Corpus Christi, Texas Refinery
- Motiva's 285,000 b/d Port Arthur, TX Refinery
- Houston Refining's 270,600 b/d Houston, TX Refinery
- ConocoPhillips's 247,000 b/d Sweeny, TX Refinery
- Valero's 199,500 b/d Texas City, TX Refinery
- Pasadena Refining's 100,000 b/d Pasadena, TX Refinery
- Valero's 83,000 b/d Houston, TX Refinery
- Marathon's 76,000 b/d Texas City, TX Refinery

In addition, GreenHunter Energy planned to shut its 105 million gallon per year biodiesel plant in Houston in anticipation of Hurricane Ike. All refineries shut down by Hurricane Gustav are either restarting or operating. The last remaining refinery shut down by Hurricane Gustav - ConocoPhillips Belle Chasse - had power restored on September 11, and has entered restart procedures.

http://www.oe.netl.doe.gov/named_event.aspx?ID=18

Major Gulf Coast Oil Pipelines Shut Down, Partially Shut or at Reduced Rates as **Hurricane Ike Approaches**

Major crude pipelines originating in Texas and Louisiana have shut down operations. Petroleum product and natural gas liquids pipelines have either shut or partially shut their operations as of September 12, 10:00 AM EDT. Most offices located near Houston have been evacuated making it difficult to confirm impacted pipelines. Shut pipelines include:

Crude Oil Pipelines:

- Capline 1,200,000 b/d
- LOOP/Locap 1,200,000 b/d
- Genesis gathering/refinery
- Marathon gathering

Product Pipelines:

- Centennial 210,000 b/d
- Colonial 2,400,000 b/d (partially shut)
- CP Seaway Products 85,000 b/d
- CP Sweeny to Pasadena 115,000 b/d
- Explorer 700,000 b/d
- Longhorn 72,000 b/d
- Magellan 120,000 b/d (partially shut)
- NuStar/Texas Gulf Coast ~100,000 b/d
- Plantation 600,000 b/d (reduced rates)
- TEPPCO 330,000 b/d (partially shut)

NGL Pipelines:

- Dixie 100,000 b/d (partially shut)
- Enterprise 641,000 b/d

http://www.oe.netl.doe.gov/named_event.aspx?ID=18

http://www.aopl.org/posted/888/Oil Pipeline Status Report 2008 9 12d.225817.pdf

Twenty Gulf Coast Gas Processing Plants Confirmed Shut as Hurricane Ike Approaches

There are 38 major natural gas processing plants in the path of Hurricane Ike with a total operating capacity of 17.3 billion cubic feet per day (Bcf/d). As of 12:00 PM EDT, September 12, twenty of these plants have been confirmed as shut down which includes those plants still impacted from Gustav. The total shut down operating capacity is 10.5 Bcf/d. In addition, 5 plants with total capacity of 3.8 Bcf/d, have been confirmed as operating at normal levels and currently there is no information available on 11 plants totaling 2.2 Bcf/d.

Natural gas processing plants that have been confirmed shut:

Lousiana/Alabama:

- Yscloskey St. Bernard, LA 1,850 MMcf/d
- Venice Plaquemines, LA -1,300 MMcf/d
- Sea Robin Vermilion, LA 950 MMcf/d
- Bluewater Acadia, LA 950 MMcf/d
- Larose Lafourche, LA 600 MMcf/d
- Cameron Meadows Cameron, LA 500 MMcf/d
- Iowa Jefferson Davis, LA 500 MMcf/d
- Grand Chenier II Cameron, LA 400 MMcf/d
- Mobile Bay (Duke) Mobile, AL 300 MMcf/d (shut for maintenance)
- Sabine Pass Cameron, LA 300 MMcf/d
- Stingray Cameron, LA 300 MMcf/d
- Lowry Cameron, LA 265 MMcf/d
- Barracuda Cameron, LA 225 MMcf/d
- Burns Point St. Mary, LA 160 MMcf/d

Texas:

- East Texas (MarkWest) Panola, TX 780 MMcf/d
- Markham Matagorda, TX 300 MMcf/d
- Matagorda Matagorda, TX 250 MMcf/d
- Point Comfort Calhoun, TX 200 MMcf/d
- Port Arthur Jefferson, TX 200 MMcf/d
- Wilcox Lavaca, TX 200 MMcf/d

http://www.oe.netl.doe.gov/named_event.aspx?ID=18

Numerous Offshore Natural Gas Pipelines Issue Force Majeure, Flow Reductions as Hurricane Ike Rages Across Gulf of Mexico and Effects of Gustav Linger

As of 10:00 AM EDT September 12, there are multiple offshore natural gas pipelines that continue to experience gas flow reductions or complete shut-in of their systems due to Gustav. As Hurricane Ike approaches the Gulf of Mexico, many pipelines have declared force majeure and have shut-in operations. The following pipeline systems have issued critical notices:

- ANR Pipeline Co. Patterson Compressor station has shut down effectively eliminating all upstream points until further notice.
- Chandeleur Pipeline Co. -Notice of reduced flow.
- Destin Pipeline Co. Force Majeure carried over from Gustav all offshore points remain shut-in.
- Discovery Gas Transmission Force Majeure declared Friday, Sept 12.
- Enbridge (UTOS) Force Majeure declared Thursday, Sept 11.
- Garden Banks Gas Pipeline Force Majeure declared Tuesday, Sept 9.
- High Island Offshore System Forced Majeure declared Wednesday, Sept 10.
- KinderMorgan (Texas & Tejas) Force Majeures declared Friday, Sept 12. No storage capability.
- Manta Ray Offshore Gathering Force Majeure declared Tuesday, Sept 9.
- Mississippi Canyon Pipeline Force Majeure carried over from Gustav unknown at time to return to service.
- Natural Gas Pipeline Co of Am. Force Majeure declared Thursday, Sept 11. Compressor Station 342 shut down.
- Nautilus Pipeline Co. Force Majeure delcared Tuesday, Sept 9.
- Sabine Pipe Line Force Majeure declared Friday, Sept 12 evacuation of parish.
- Sea Robin Pipeline Co. Sea Robin processing plant shut down, mandatory evacuation.
- Southern Natural Gas Co. Noticed of reduced flow Producers have notified SNG of evacuations of platforms.
- Stingray Pipeline Co. Forced Majeure declared Wednesday, Sept 10.
- Tennessee Gas Pipeline Tennessee Gas Pipeline 9/10/08 Flow is restricted from off-shore points until further notice impacting a decline of 1 billion cubic feet per day of gas flow.
- Texas Eastern Transmission Some facilities remain shut in due to Gustav; mandatory evacuation resulting in shut-in of facilities (compressor stations) impacting gas flow.
- Texas Gas Transmission Notice of reduced flow Producers have notified TGT of evacuations of platforms.
- Transcontinental Gas Pipe Line Instituting Emergency Gas Supply Procedures on Sep 11, 2008 due to reduced flows from off-shore points.
- Trunkline Gas Pipeline Expecting producer shut-ins action will be taken as required. Houston offices closed Friday, September 12, 2008.
- Venice Gathering System Remains shut in from the effects of Gustav.
- Dauphin Island Gathering Partners Force Majeure declared. Deliveries will be unavailable until Sep 12, 2008 at the earliest and will not resume until Ike has passed.

http://www.oe.netl.doe.gov/named_event.aspx?ID=18

Update: Hurricane Ike Raises Entergy's Outages to 120,000 in Louisiana and Texas

As of 5:00 PM EDT September 12, Entergy reported 111,226 customers without power in its Louisiana service territories and 9,261 customers without power in its Texas service territory. Late on September 11, Entergy had reported that it had reduced outages due to Hurricane Gustav in its Louisiana service territories to 60,586 customers and the company had no outages in Texas. New outages reported on September 12 are attributed to Hurricane Ike. Entergy has expressed concern that potential damage from Hurricane Ike could be more severe than under normal conditions due to continuing impacts from Gustav, such as fewer redundant lines to supply multiple sources of power, weakened trees that could be more susceptible to winds and unsecured debris from Gustav that could impact the system.

http://www.entergy.com/storm_center/outages.aspx http://www.entergy.com/

Texas and Louisiana Ports Closed as Hurricane Ike Approaches

All ports in Texas from Freeport west to the Louisiana border are closed as the coast is beginning to be battered by gale force winds this morning. The Port of Lake Charles in Louisiana is also closed. The Port of Corpus Christi, Texas is officially open as of the morning of September 12, but the Pilot's Association has suspended all boardings. http://www.oe.netl.doe.gov/named_event.aspx?ID=18

MMS Releases Preliminary Offshore Damage Reports from Hurricane Gustav

U.S. Minerals Management Service (MMS) has released preliminary damage reports for the Gulf of Mexico oil and gas infrastructure resulting from Hurricane Gustav. From August 31, 2008 through September 1, 2008, approximately 677 oil and gas production platforms in the Gulf of Mexico were exposed to hurricane conditions, winds greater than 75 miles per hour. As of September 10, MMS has received one report of a small platform being destroyed offshore Louisiana. The platform was an unmanned structure that produced approximately 1,300 b/d of oil and 30 MMcf/d of natural gas. MMS has received a report of one platform having extensive damage which may take from three to six months to repair. Reports have been received that five platforms received moderate damage taking one to three months before production can be restored and 35 platforms received minor damage which is expected to take up to one month to repair and restore production.

http://www.mms.gov/ooc/press/2008/press0911a.htm

DOE Releases More Oil from SPR in Response to Hurricane Gustav Supply Disruptions

On September 11, the U.S. Department of Energy will deliver 130,000 barrels of oil from the Strategic Petroleum Reserve to Placid Oil's Port Allen refinery along a Shell pipeline in Louisiana. The Department will also deliver an additional 250,000 barrels of oil from the Strategic Petroleum Reserve to Marathon Petroleum Company's Midwest refineries along the Capline pipeline system. The oil was requested by Marathon and Placid because of disruptions in supply caused by Hurricane Gustav.

http://www.oe.netl.doe.gov/named_event.aspx?ID=18 http://www.doe.gov/news/6527.htm

EPA Issues Multi-State Fuel Waiver Due to Hurricane Impacts to Supply

On September 11, the Environmental Protection Agency (EPA), in collaboration with the Department of Energy, issued a multi-state emergency fuel waiver, due to the consequences of Hurricane Gustav and the pending shortages and damage expected from Hurricane Ike. EPA waived the 7.0/7.8 and 9.0 psi Reid Vapor Pressure (RVP) maximums and ethanol additive federal requirement for gasoline in the States of AL, FL, GA, LA, MS, NC, SC, TN and TX and the reformulated gasoline requirement in TX through September 30. AL, FL, GA, LA, NC and TX all received extensions to their previous waivers. The waivers will allow the use of 11.5 psi RVP fuel and conventional gasoline.

http://www.oe.netl.doe.gov/named_event.aspx?ID=18 http://www.epa.gov/compliance/resources/policies/civil/caa/mobile/multistate-fuelwaiver081109.pdf

Fuel Supply Constraints Expected in Wake of Hurricane Ike - Kolevar

The Department of Energy's Kevin Kolevar said that Hurricane Ike will likely cause fuel supply constraints but added that impacts would likely be limited to the Gulf Coast and Eastern Seaboard. Reuters, 16:05 September 11, 2008

U.S. Gulf Wholesale Gasoline Climbs to Highest Level Since 1971

Wholesale gasoline in the U.S. Gulf rose to \$4.91 per gallon on September 12, the highest level since 1971 as Hurricane Ike forced the shutdown of 13 refineries along the Texas Gulf Coast. Bloomberg News, 16:45 September 12, 2008

U.S. Gulf Coast Draws European Gasoline Imports

Gasoline cargoes from Europe are being diverted to the U.S. Gulf Coast due to fuel supply constraints brought about by hurricanes Gustav and Ike. Shipping sources say at least five cargoes of both Eurograde and RBOB are fixed to arrive in the Gulf in September but port closures and shipping disruptions could cause delays in some deliveries. Reuters, 09:42 September 12, 2008

Update: Entergy's 1,075 MW Waterford Nuke Unit 3 in Louisiana at Full Power by September 12

The Nuclear Regulatory Commission reported that on the morning of September 11 the unit was operating at 64 percent. The plant had been offline since August 31 in anticipation of Hurricane Gustav. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2008/http://www.entergy.com/

Texas Transmission Providers to File Transmission Plan to Support Wind Generation

A diversified group of qualified Texas transmission providers announced that on Friday, September 12, it jointly will file a detailed proposal with the Public Utility Commission of Texas (PUCT) for the construction of electric transmission as part of the Competitive Renewable Energy Zone (CREZ) process. The group's joint plan includes a comprehensive implementation plan to build approximately 2,400 miles of 345-kV transmission lines and associated electrical substations to meet the needs of the state's Competitive Renewable Energy Zones. Members of the group include: Electric Transmission Texas, LLC, (ETT), LCRA Transmission Services Corporation (LCRA TSC), Oncor Electric Delivery, Sharyland Utilities, South Texas Electric Cooperative (STEC) and Texas-New Mexico Power Company (TNMP).

http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=ind_focus.story&STORY=/www/story/09-11-2008/0004883703&EDATE=THU+Sep+11+2008,+05:36+PM

Oklahoma Regulators Approve 345-kV Transmission Line as Part of OG&E's Renewable Energy Program

The Oklahoma Corporation Commission voted 3-0 today to approve OG&E's comprehensive renewable energy program, which includes construction of a 115-mile, 345 kV transmission line between Woodward and Oklahoma City. The line will facilitate grid access for wind energy resources in western Oklahoma. OG&E submitted a request to the Commission in May, detailing its commitment to quadruple its wind energy capacity in the state to at least 770 MW.

 $\frac{\text{http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=ind}}{2008/0004883647\&EDATE=THU+Sep+11+2008,+04:17+PM}$

NMC's 578 MW Monticello Nuke Unit in Minnesota Shut by September 12

The Nuclear Regulatory Commission reported that on the morning of September 11 the unit was operating at full power.

Information derived from the NRC Power Reactor Status Reports: http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2008/

SCE's 1,080 MW San Onofre Nuke Unit 3 in California Ramped Up to 18 Percent by September 12

The Nuclear Regulatory Commission reported that on the morning of September 11 the unit was not operating. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2008/

Update: Bruce Power's 822 MW Bruce Nuke Unit 6 in Ontario Returns to Service September 12

The unit was shut on September 6 for work on the heat transport system. Reuters, 09:13 September 12, 2008

Petroleum

Technical Failure Briefly Disrupts Flow on BTC Pipeline September 11

According to officials of Turkish pipeline company Botas, a technical failure on the 1 million b/d Baku-Tbilisi-Ceyhan (BTC) pipeline disrupted the oil flow late September 11. The company reported that technicians were working on the affected station and expected oil flow to restart within a few hours. http://www.hurrivet.com.tr/english/finance/9886125.asp?scr=1

Shell Extends Force Majeure on Nigerian Bonny Light Crude Exports

Royal Dutch Shell said September 12 that it has extended the force majeure because of security concerns in the Niger Delta region and because the company has found more leaks in the Bonny Light pipeline. Shell did not give specific date for the end of the force majeure. The force majeure was initially declared in July following sabotage to the Nembe Creek pipeline and was set to expire at the end of September. http://uk.reuters.com/article/hotStocksNews/idUKLC72253620080912

Update: BP's Baku-Supsa Pipeline in Georgia Remains Shut

BP said September 12 that the pipeline remains shut due to the security situation in Georgia. BP originally shut the pipeline on August 12. Before being shut, the pipeline carried between 45,000 and 90,000 b/d. Reuters, 09:34

Venezuela's Chavez Expels U.S. Ambassador, Threatens to Cut Oil Exports to the U.S. if Attacked

http://www.bloomberg.com/apps/news?pid=20601086&sid=aOO1Fz6oFOio&refer=latin_america

Natural Gas

Valve Malfunctions on Turbine at Goldsmith Gas Processing Plant in Texas September 11 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=113927

Other News

Nothing to report.

Energy Prices

U.S. Oil and Gas Prices September 12, 2008			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	101.19	106.18	79.91
NATURAL GAS Henry Hub \$/Million Btu	8.02	7.24	6.13

Source: Reuters

Energy Notes

North Dakota Gives Preliminary Approval for Air Permit for Hyperion's Proposed 400,000 b/d Refinery

http://www.argusleader.com/apps/pbcs.dll/article?AID=/20080912/NEWS/809120313/1001/news

Links

This Week in Petroleum from the Energy Information Administration (EIA) http://tonto.eia.doe.gov/oog/info/twip/twip.asp

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.doe.gov/oil gas/petroleum/data publications/weekly petroleum status report/wpsr.html Updated after 10:30 AM & 1:00 PM EST every Wednesday.

Natural Gas Weekly Update from EIA

http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 PM EST every Thursday.

ENERGY ASSURANCE DAILY

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